

### ABSTRACT OF THE DISCLOSURE

A multimedia Internet-protocol (IP) data delivery system using a virtual streaming method. The invented system comprises a plurality of clients, each of which comprising a downloading unit, a media data cache and a playing unit, a plurality of IP ports connecting the clients to the Internet, an IP port controlling means controlling the connection between the client and the IP-port and a scheduling means scheduling the downloading tasks of the downloading unit and the playing tasks of the playing unit independently. In the cases of many of broadband access networks using the virtual streaming method in this invention, downloading a media file takes less time to complete than playing the media file does, and the IP ports can be released after the downloading is completed and before the playing is completed. As a result, in comparison with conventional streaming methods, a number of IP ports can accommodate more number of subscribers, or the effective throughput can be higher because of less packet collision occurs. In the cases of most of narrowband networks, the virtual streaming method in this invention makes it possible to delivery high-quality IP data into the media cache and, independently from the downloading activity, play the media file with VHS quality when the media file data in the media data cache is available.